WHAT IS CLAIMED IS:

1. A method of detecting tilt angle of an optical axis of a camera shooting an image display surface, in relation to a vertical line of said image display surface, said means comprising:

a means for detecting a localized focus degree in a plurality of regions within said image display surface; and

a means for determining a tilt angle according to a value of deviation of said localized focus degree of said plurality of regions.

2. The method of detecting tilt angle of an optical axis according to Claim 1, wherein said means for detecting said localized focus degree further comprises:

a means for determining brightness value of an image from one end to another end of said region along one direction, wherein said means for determining brightness value covers a whole region in a direction perpendicular to said one direction;

a means for accumulating a difference in brightness value adjacent portions of said regionin said one direction only for an amount exceeding a fixed value, wherein said means for accumulating performs accumulation throughout said region; and

a means for dividing said accumulated difference in brightness value by a value of area of said region.

3. The method of detecting tilt angle of an optical axis according to Claim 2, wherein

said plural regions to detect focus value in said one direction are disposed along one direction; and

said tilt angle in said one direction is detected by a value of deviation of focus values in said plural3 regions.

4. The method of detecting tilt angle of optical axis according to Claim 2, wherein

said plural regions to detect focus value in said one direction are disposed along one line;

said plural regions to detect focus value in an perpendicular direction to said one direction are disposed along said perpendicular direction;

said tilt angle in said one direction is determined by a deviation in focus value in said plural regions disposed along said one direction;

said tilt angle in said perpendicular direction to said one direction is detected by deviation of focus value in said plural regions disposed along said perpendicular direction to said one direction; and

said detection of tilt angle in said one direction and in said perpendicular direction is performed separately or simultaneously.

5. The method of detecting tilt angle of optical axis according to Claim 3, wherein

said plural regions to detect focus value in said one direction are disposed along one line;

said plural regions to detect focus value in an perpendicular direction to said one direction are disposed along said perpendicular direction;

said tilt angle in said one direction is determined by a deviation in focus value in said plural regions disposed along said one direction;

said tilt angle in said perpendicular direction to said one direction is detected by deviation of focus value in said plural regions disposed along said perpendicular direction to said one direction; and

said detection of tilt angle in said one direction and in said perpendicular direction is performed separately or simultaneously.

6. The method of detecting tilt angle of optical axis according to Claim 1, wherein a region of detection of localized focus degree within said image display surface is set to a central portion of said image display surface.

7. The method of detecting tilt angle of optical axis according to Claim 2, wherein a region of detection of localized focus degree within said image display surface is set to a central portion of said image display surface.

8. The method of detecting tilt angle of optical axis according to Claim 3, wherein a region of detect of localized focus degree within said image display surface is set to a central portion of said image display surface.

9. The method of detecting tilt angle of optical axis according to Claim 4, wherein a region of detection of localized focus degree

within said image display surface is set to a central portion of said image display surface.

10. An apparatus for detecting tilt angle of an optical axis of a camera shooting an image display surface, in relation to a vertical line of said image display surface, comprising:

a detecting means for detecting a focus degree in plural regions within said image display surface; and

a detecting means for detecting a tilt angle of said optical axis by determining a deviation of said focus degree in said plural regions.

11. An image measurement apparatus comprising:

a camera shooting an image display surface for performing measurement of said image display surface;

a control mechanism for controlling a tilt angle of said camera, in relation to said image display surface; and

a detecting means for detecting tilt angle of an optical axis; wherein

said control mechanism receives a value of deviation of focus value detected by said device for detecting tilt angle of optical axis as an input, and controls tilt angle of said camera.

12. The image measurement apparatus according to Claim 10, wherein said detecting means further comprises:

a first disposing means for disposing plural regions of detection of focus value in one direction of said image display surface along said one direction;

a second disposing means for disposing plural regions of detection of focus value in a perpendicular direction to said one direction along said perpendicular direction;

a detecting means for detecting said tilt angle in said one direction using values of deviation of focus value in said plural regions disposed along said one direction; and

a detecting means for detecting said tilt angle in said perpendicular direction to said one direction using values of deviation of focus value in said plural regions disposed along said perpendicular direction to said one direction; wherein

said detecting of tilt angles for different directions performed in sequence or in parallel;

13. A method for detecting tilt angle of an optical axis of a camera shooting an image display surface, in relation to a vertical line of said image display surface, comprising the following steps of:

detecting a focus degree in plural regions within said image display surface; and

detecting tilt angle of said optical axis by determining a deviation of said focus degree in said plural regions.

14. A method for image measurement comprising the following steps of:

shooting with a camera an image display surface;

detecting a tilt angle of an optical axis comprising the following steps of:

detecting a focus degree in plural regions within

said image display surface; and

detecting tilt angle of said optical axis by determining a deviation of said focus degree in said plural regions; and

controlling tilt angle of said camera, in relation to said image display surface.